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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,495	10/16/2003	Daisuke Kitazawa	244077US90	5366

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EXAMINER	
MURPHY, RHONDA L	

ART UNIT	PAPER NUMBER
2616	

NOTIFICATION DATE	DELIVERY MODE
06/12/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/685,495	KITAZAWA ET AL.	
	Examiner	Art Unit	
	RHONDA MURPHY	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 April 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This communication is responsive to the Request for Continued Examination (RCE) filed on 4/16/08. Accordingly, claims 1 – 26 are currently pending in this application.

Response to Arguments

1. Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 – 4, 6 – 11 and 13 – 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Immonen et al. (US 7,010,305).

Regarding claims 1, 14 and 15, Immonen teaches a radio communication system (*Fig. 1*) comprising: a plurality of mobile stations (*UE 11; only one illustrated, however plurality of mobiles exist in the communication system, col.*

13, lines 43-45); and a base station (*SGSN 12 and HLR 13*) comprising: a packet classification unit (*Fig. 4, PAC 34*) configured to classify packets (*col. 13, lines 9-25*) received/transmitted from/to a plurality of mobile stations into a quantitative guarantee type packet having a request value that indicates quantitative value for communication quality (*col. 8, lines 47-66; further described in col. 13, lines 9-14*) or a relative guarantee type packet not having the request value that indicates quantitative value for communication quality (*col. 8, lines 35-43; QoS attributes are not indicated by user equipment; further described in col. 13, lines 15-18*), according to QoS class of each packet (*col. 8, lines 33-35, 48-50*); and a transmission order controller (QoS *profile 14 and service profile 15; col. 8, lines 33-34, 54-57*) configured to control a transmission order of the packets for every classified quantitative guarantee type packet and every classified relative guarantee type packet (*col. 8, lines 30-61*).

Regarding claim 2, Immonen teaches the base station of claim 1, wherein the transmission order controller gives priority to the quantitative guarantee type packet over the relative guarantee type packet, in the transmission order (col. 10, lines 30-40, further described in col. 12, line 50 to col. 13, line 27).

Regarding claim 3, Immonen teaches the base station of claim 1, wherein the transmission order controller controls the transmission order based on a quality of service class (col. 13, lines 9-12).

Regarding claim 4, Immonen teaches the base station of claim 1, wherein the transmission order controller controls the transmission order based on radio

quality between the base station and the plurality of mobile stations (col. 8, lines 30-40, 54-58).

Regarding claim 6, Immonen teaches the base station of claim 1, further comprising: a measurement unit (located within SGSN 12) configured to measure communication quality for the request value (col. 9, lines 53-62), wherein the transmission order controller compares the request value with a measured value by the measurement unit, and controls the transmission order based on a comparison result (col. 9, lines 53-62).

Regarding claim 7, Immonen teaches the base station of claim 1, further comprising: a measurement unit (located within SGSN 12) configured to measure communication quality for the request value (col. 9, lines 53-62), wherein the packet classification unit restrains storing the quantitative guarantee type packet in a transmission buffer for storing the packets, when a measured value by the measurement unit is more than the request value (col. 13, lines 58 to col. 14, line 3).

Regarding claim 8, Immonen teaches the base station of claim 1, wherein the transmission order controller controls the transmission order such that a number of the quantitative guarantee type packets transmitted in unit time becomes equal to a number of packets satisfying the request value (col. 12, lines 50-66).

Regarding claim 9, Immonen teaches the base station of claim 1, further comprising: a radio resource assignment unit (located within SGSN 12) configured to assign to the packets radio resources for transmitting the packets, according to the transmission order (col. 8, lines 30-40, 54-58).

Regarding claim 10, Immonen teaches the base station of claim 9, wherein the radio resource assignment unit assigns the radio resources to the quantitative guarantee type packet based on the request value (col. 8, lines 30-40, 54-58).

Regarding claim 11, Immonen teaches the base station of claim 9, wherein the radio resource assignment unit assigns remaining radio resources to the quantitative guarantee type packet existing in a transmission buffer for storing the packets, after assigning the radio resources to the quantitative guarantee type packet and the relative guarantee type packet (col. 9, lines 39-47).

Regarding claim 13, Immonen teaches the base station of claim 1, further comprising: a determination unit (located within SGSN 12) configured to determine a quality of service class in a core network for a packet (col. 8, lines 30-46), which has been received from a mobile station and is to be transmitted to the core network, based on whether the packet is the quantitative guarantee type packet or the relative guarantee type packet (col. 8, lines 35-66).

Regarding claims 16, 18 and 20, Immonen teaches the base station of claim 1, wherein the packet classification unit classifies the packet into a quantitative guarantee type packet having a request value for communication quality that is not a QoS class (col. 8, lines 51-58).

Regarding claims 17 and 19, Immonen teaches the base station of claim 16, wherein the packet classification unit classifies the packets into a quantitative guarantee type packet having a request value for at least one of a specific quantity of at least one of a transfer speed, a transfer delay or jitter (col. 8, lines 51-58).

Regarding claims 21, 23 and 25, Immonen teaches the base station of claim 1, wherein if radio resources remain after assignment to the quantitative guarantee type packet in accordance with the request value, the remaining radio resources are assigned to the relative guarantee type packets by the transmission order controller (col. 9, lines 39-47).

Regarding claims 22, 24 and 26, Immonen teaches the base station of claim 21, wherein if radio resources still remain after assignment to the relative guarantee type packets, the further remaining radio resources are assigned to the remaining quantitative guarantee type packets (col. 9, lines 39-47).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of

35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Immonen et al. (US 7,010,305) as applied to claim 1 and further in view of Rinne (US 2005/0185651 A1).

Regarding claim 5, Immonen teaches the base station of claim 1, wherein the transmission order controller controls a transmission order of a plurality of quantitative guarantee type packets.

Immonen fails to explicitly disclose wherein the transmission order controller controls a transmission order of a plurality of quantitative guarantee type packets having same request value, such that communication quality for the request value becomes same, among a plurality of mobile stations receiving/transmitting the quantitative guarantee type packets

However, Rinne teaches wherein the transmission order controller controls a transmission order of a plurality of quantitative guarantee type packets having same request value, such that communication quality for the request value becomes same, among a plurality of mobile stations receiving/transmitting the quantitative guarantee type packets (page 6, paragraph 85).

Thus, it would have been obvious to one skilled in the art to modify Immonen's system by controlling the transmission order of the quantitative guarantee type packets having same request value, as taught by Rinne, for the purpose of scheduling packets with the same transmission requirements.

7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Immonen et al. (US 7,010,305).

Regarding claim 12, Immonen teaches the base station of claim 1, further comprising: a request value attached to a packet arrived from a core network, based on a quality of service class for the packet in the core network (col. 12, line 61 to col. 13, line 27), wherein the packet classification unit classifies a packet having the request value attached thereto into the quantitative guarantee type packet (col. 13, lines 9-14), and classifies a packet not having a request value attached thereto into the relative guarantee type packet (col. 13, lines 15-18).

Immonen fails to explicitly disclose an attaching unit to attach the request value.

However, Immonen does disclose a packet with an attached request value arrived from a core network.

In view of this, it would have been obvious to one skilled in the art to include an attaching unit for attaching the request value, in order to affix a particular request value to the packet.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: US Patent Publication 2002/0032788 A1 to Emanuel et al., US Patent Publication 2004/0022191 A1 to Bernet et al., US Patent 6,807,426 to Pankaj, US Patent 6,917,588 to Cao et al. and US Patent 7,233,602 to Chen et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RHONDA MURPHY whose telephone number is (571)272-3185. The examiner can normally be reached on Monday - Friday 9:00 - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Firmin Backer can be reached on (571) 272-6703. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Rhonda Murphy
Examiner
Art Unit 2616

/FIRMIN BACKER/
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